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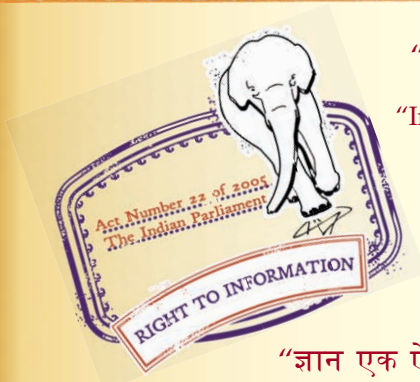
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IS 5465 (1969): SONALI bark [CHD 17: Leather, Tanning Materials and Allied Products]



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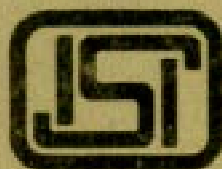
“Knowledge is such a treasure which cannot be stolen”

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Indian Standard
SPECIFICATION FOR
SONALI BARK

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Indian Standard

SPECIFICATION FOR SONALI BARK

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Indian Standard

SPECIFICATION FOR *SONALI BARK*

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 15 December 1969, after the draft finalized by the Tanning Materials and Allied Products Sectional Committee had been approved by the Chemical Division Council.

0.2 *SONALI* or *SONARI* (*Cassia fistula* Linn.) is a moderate sized deciduous tree with a rather open crown, found in deciduous forests throughout the greater part of India (ascending to 1200 metres in the Himalayas), Burma and Ceylon. *Sonali* being deciduous tree is never found along with ever green species, but confined to deciduous forest only. The tree is one of the most beautiful flowering trees of India. The vernacular names are *AMALTAS* (Hindi), *SONALI* (Bengali), *SANARU* (Assam), *SONALU* (Nepali), *SONARI* (Oriya), *BAHAWA* (Marathi), *KAKKE* (Kanarese), *KONNAI* or *KONNAM* (Tamil), and *RELA* (Telugu). The bark is about 0.65 cm thick in younger trees, smooth, light grey of reddish brown exfoliating in hard scales.

0.3 The *SONALI* bark may be used alone or in conjunction with *BABUL* [*Acacia nilotica* (Linn.) Del], *GORAN* [*Cerriops decandra* (Griff.) Ding Hon-Syn. *Cerriops roxburghiana* Arn., fam. Rhizophoraceae], Myrobalans (*Terminalia chebula* Retz.) and other types of tannins. The bark is highly astringent and belongs to the condensed (catechol) type of tannin. Due to its lighter colouring properties, this may be used for the manufacture of upholstery and light coloured lining leathers. The leather produced with *SONALI* bark possesses smooth grain, very pale almost white colour. However, as penetration power of this bark infusions is comparatively low, it is often used as a blend with other barks, like *BABUL* and *AVARAM*. Further, on account of its low tan-content and lower tan-nontan ratio, it is not economical for extract manufacture as such but extract can profitably be manufactured when blended with *GORAN* or *AVARAM*.

0.4 This standard contains clauses **4.1** and **A-2.4** which call for an agreement between the purchaser and the supplier.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated,

expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for *SONALI* bark intended for tanning and for the use in the manufacture of blended tanning extract.

2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given in IS : 1640-1960† shall apply.

3. REQUIREMENTS

3.1 Material — The material shall be the bark of *SONALI* tree, *Cassia fistula* Linn., properly collected and dried in shade.

3.2 The material shall also comply with the requirements given in Table 1, when tested according to the methods indicated in col 4 of the table.

TABLE 1 REQUIREMENTS FOR *SONALI* BARK

SL No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST, REF TO CL No OF IS : 5465-1969*
(1)	(2)	(3)	(4)
i)	Moisture, percent by weight, <i>Max</i>	15	6
ii)	†Non-tans, percent by weight, <i>Max</i>	13	9
iii)	†Tannins, percent by weight, <i>Min</i>	12	10
iv)	pH of analytical strength solution, <i>Min</i>	4.5	12
v)	Colour:		13
	Yellow/red, <i>Min</i>	2	
	Red, <i>Max</i>	5	

*Methods of test for vegetable tanning materials.

†Calculated on moisture free basis.

*Rules for rounding off numerical values (*revised*).

†Glossary of terms relating to hides, skins and leather.

4. PACKING AND MARKING

4.1 Packing — Unless otherwise agreed to between the purchaser and the supplier the *SONALI* bark shall be packed in fairly light-proof containers like gunny bags.

4.2 Marking — Packages shall be marked on the outside with the following information:

- a) Name of the material;
- b) Net weight of the material;
- c) Supplier's name or recognized trade-mark, if any; and
- d) Date of packing.

4.2.1 The package may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by ISI and operated by the producer, has the further safeguard that the products as actually marketed are continuously checked by ISI for conformity to the standard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

5. SAMPLING AND CRITERIA FOR CONFORMITY

5.1 Representative samples of the material shall be drawn in accordance with Appendix A and their conformity to the requirements of this standard shall be judged as follows.

5.2 Number of Tests — Each test sample in the set shall be tested individually for all the requirements of this specification.

5.3 Criterion for Conformity — The lot shall be declared to conform to the requirements of this specification if each test sample in the set passes all the tests.

APPENDIX A

(Clause 5.1)

SAMPLING OF SONALI BARK

A-1. SCALE OF SAMPLING

A-1.1 Lot — In a single consignment all the *SONALI* bark of the same form of cutting, collected and dried under similar conditions, shall constitute one lot.

A-1.2 For ascertaining the conformity of the material to the requirements of this specification, each lot shall be considered separately. The number of packages to be selected for this purpose shall depend on the size of the lot and shall be in accordance with Table 2.

A-1.3 The packages shall be selected at random from the lot. To ensure randomness of selection, random number tables (*see* IS : 4905-1968*) shall be used. In case, random number tables are not available, the following procedure may be adopted:

Starting from any package, count all the packages in the lot as 1, 2, 3,, etc, up to r and so on where r is the integral part of N/n where N is the number of packages in the lot and n the number to be sampled. Every r th container thus counted shall be withdrawn to constitute the sample.

TABLE 2 NUMBER OF PACKAGES TO BE SAMPLED

NO. OF PACKAGES IN THE LOT	NO. OF PACKAGES TO BE SAMPLED
N (1)	n (2)
Up to 25	3
26 „ 50	4
51 „ 150	5
151 „ 300	6
301 „ 500	7
501 „ 1 000	8
1 001 and above	9

A-2. PREPARATION OF SAMPLES

A-2.1 From each of the packages selected according to A-1.2 small portions of the material shall be taken from different parts so as to

*Methods for random sampling.

obtain a most representative sample of the package. The total quantity of the material taken from a package shall be at least three times the quantity needed for carrying out all the tests.

A-2.2 The material obtained from each package in **A-2.1** shall be divided into three equal parts each forming a test sample representing the package. One set of these samples, each representing a selected package shall be marked for the purchaser, another for the supplier and the third set kept as a referee sample.

A-2.3 All the test samples shall be immediately transferred to separate sample containers and shall be sealed air-tight and marked with full particulars necessary for proper identification, such as name of the supplier, place and date of packing, year of production, lot number, date of sampling, name of sampler, etc.

A-2.4 The referee sample consisting of a set of test samples shall bear the seal of both the supplier and the purchaser and shall be kept at a place till such time and under conditions agreed to between the two for use in case of disputes.

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